



The British Museum (Natural History) Celebrating one hundred years at South Kensington 1881–1981

Compiled and edited by Anthony P. Harvey

Department of Library Services, British Museum (Natural History), Cromwell Road, London SW7 5BD

Introduction

On April 18 1881 the doors of the newly built Romanesque building facing Cromwell Road, South Kensington, opened to admit the first visitors to the vastness of the Central Hall of the British Museum (Natural History). There was no formal opening, for the Natural History Museum was considered as merely a new location for the natural history collections housed, since 1756, in the British Museum at Bloomsbury, some 3 miles away. Indeed, until the British Museum Act of 1963 the two Museums shared the same Board of Trustees.

By the time the collections were moved from Bloomsbury to South Kensington the Department of Natural and Artificial Productions—one of the three foundation departments of the British Museum and the one to which Sir Hans Sloane's natural history specimens were assigned—had grown by presentation, purchase and exchange into the separate departments of Zoology, Geology (since 1956 Palaeontology), Mineralogy and Botany.

Since 1881 only one more scientific department has been formed and that from a natural maturing of the 'Insect Room' of the Department of Zoology into the Department of Entomology in 1913. However, the Museum collections have grown from a few million items to more than 50 million; the number of visitors from 231 284 in 1881 to a peak of over three million in 1977.

Today the Museum has two functions: curation of the national collections and associated taxonomic research, and public education. Taxonomic research, the identification and classification of animals, plants, fossils and minerals, is of considerable importance in many applied fields where it is essential to have an exact knowledge of the identity of organisms and minerals, e.g. in medicine, veterinary science, agriculture, forestry, fisheries, ecology, conservation, the storage of perishable products, and in the mining and oil industries. The Museum is uniquely placed, with its collections from all over the world, to undertake such research work.

The scientific collections and work of the Museum are supported by the 750 000 volumes and 9000 current periodicals in the Department of Library Services, and by the skills in biometrics, electronic data processing, electron microscopy, photography, publishing and specialist workshops of the Department of Central Services, while the Department of Administrative Services provides support to all staff.

Public education, through exhibitions, publications and various services to school children and other visitors, is the responsibility of the Department of Public Services. A major new exhibition scheme was initiated in 1972 and to date five phases have been completed, the latest on the *Origin of Species* being opened in centenary year.

Since its foundation in 1753 and more especially in the hundred years at South Kensington the Museum has grown to become a major international centre for research in the earth and life sciences; its collections from those of an enthusiastic amateur to a world renowned data bank for the natural world; and its public exhibitions from dimly-lit and crowded cases to galleries which use the most modern techniques and technology to teach an understanding of some of the major biological themes to millions of visitors.



Left. Sir Hans Sloane (1660–1753), whose collection formed the basis of the British Museum. This portrait by Sir Godfrey Kneller, shows Sloane aged about fifty (Courtesy of the Trustees of the British Museum). *Centre.* Sir Richard Owen (1804–1892), Superintendent of the Natural History Departments of the British Museum 1856–1884, aged about eighty. *Right.* Alfred Waterhouse (1830–1905), at the age of fifty-five, the architect of the Natural History Museum building, from a portrait by Sir William Orchardson.

A centenary year

Planning for 'Centenary Year' began in June 1976 and culminated in a wide range of events throughout 1981, which reflected the diverse activities of the Natural History Museum.

Appropriately, one of the first events was a national competition to design a poster to publicize the centenary. In collaboration with the BBC TV programme *Blue Peter* young people were invited to submit their designs. Of the 33 000 entries received, the judges Sir Hugh Casson, David Attenborough and Roger Miles chose the candle-adorned *Stegosaurus* by fourteen year old Amanda Taylor as the overall winner. Amanda thus became the first mentally handicapped person to win a national art competition. The Museum also issued a medallion and a special logo was used on correspondence throughout the year.

Nineteen eighty-one began with the opening of the exhibition *Nature Stored Nature Studied*. Using books, manuscripts and drawings from the collections of the Department of Library Services and with specimens from the scientific departments, the displays described the growth of the collections. Among the great expeditions featured were: Captain James Cook's first voyage of circumnavigation; the voyage of HMS *Beagle*, with its naturalist Charles Darwin; and the pioneering voyages of oceanographic discovery of HMS *Challenger*. An audio visual programme specially prepared in the Museum took the visitor 'behind the scenes' and explained the importance of the collections and the taxonomic research carried out on them, as well as showing the way in which the libraries support the work of the Museum.

The New Exhibition Scheme, which won for the Museum the title 'Museum of the Year 1980' and led in 1981 to a special commendation in the competition for the European Museum of the Year 1980, added another element to the four already open to the public with the opening of the *Origin of Species* in May 1981.

As a contribution to the International Year of Disabled People an exhibition on British natural history, designed for the blind, was open during October and November. The exhibition offered the opportunity to blind and partially sighted visitors to handle specimens; a specially prepared tape programme was also available for their use.



Top left. Amanda Taylor (aged 14), top prize-winner in the BBC TV *Blue Peter* Natural History Museum Centenary Poster Competition, is pictured second from the left with the *Blue Peter* team, Simon Groom, Peter Duncan and Sarah Greene. (Courtesy of the British Broadcasting Corporation). Bottom left. Amanda Taylor's winning poster, a candle adorned *Stegosaurus*. Right. Lucy Butler was a winner in the 8-10 age class. Her poster was made into greeting cards to sell in the Museum bookshop.



The centenary exhibition *Nature Stored Nature Studied* showing collections, conservation and allied research at the British Museum (Natural History).

A more personal contribution to the cause of the disabled was the successful 100 mile sponsored run, from the outskirts of Bath to the Museum, by David Cooper of the Department of Zoology on July 26. He raised £1130 to be divided between Arthritis Care and the Spinal Building Appeal Fund for Stoke Mandeville Hospital.

In April the Museum joined with the Systematics Association and the Society for the Bibliography of Natural History (which was founded in the Museum in 1936), in promoting two international meetings. With the Association a symposium on the theme *Time and space in the emergence of the biosphere* was held, and with both the Association and the Society a conference entitled *History in the service of systematics*.

Three special lectures were arranged by the Scientific Officers' Association (which can trace its origins back to the pre-1919 Natural History Museum Staff Association) on the general themes of taxonomy and science.

The British Association for the Advancement of Science celebrated both its own 150th anniversary and the Museum's centenary by holding a session entitled *Animal Identities* at its annual meeting. Papers from three members of the Museum staff were included. A small exhibition showing the close connections which have existed between the Association and the Museum was held from July to December in the Museum.

The major 'scientific' event of the Museum's centenary was in November with the Open Days. All five scientific departments together with the libraries mounted a series of 145 displays which represented the wide range of research and investigation being undertaken in the Museum. In all more than 3000 individuals from universities, polytechnics, schools (sixth-formers), governmental organizations, industry—professionals and amateurs—passed along the corridors and through the storage areas and studies. Each of the exhibits was manned by an appropriate member of staff and each had a specially prepared handout. General descriptions of the Departments were also available. In conjunction with the Open Days the Photographic Section of the Department of Central Services mounted an exhibition in the Conversazione Room and also the *Museum in Focus*, which showed examples of the work produced. The latter was printed and displayed by Kodak Limited.

Certainly not all the events of the year were based on 'work'. For example on Easter Saturday—Centenary Day—each of the first 100 children through the doors received, through



A blind person visits the special British natural history exhibition for the blind and partially sighted, open during October–November.



David Cooper of the Department of Zoology welcomed by his wife at the Museum on 26 July after completing his 100 mile sponsored run to mark the International Year of the Disabled.



The Museum won a special commendation in the competition for European Museum of the Year, 1980. Here the Director, Dr R. H. Hedley (right) receives a plaque from Mr H. J. de Koster, President of the Parliamentary Assembly of the Council of Europe, at the Guildhall, London, on Monday 23 March 1981. (Courtesy of B. Mackenzie).

the generosity of the Zoological Society of London, a ticket entitling them to free admission either to the London Zoo or Whipsnade. Later in the year the children of Cockernhoe village school—also celebrating its centenary in 1981—visited the Museum attired in Victorian costume, for a Victorian natural history tour by ‘Victorian’ museum staff.



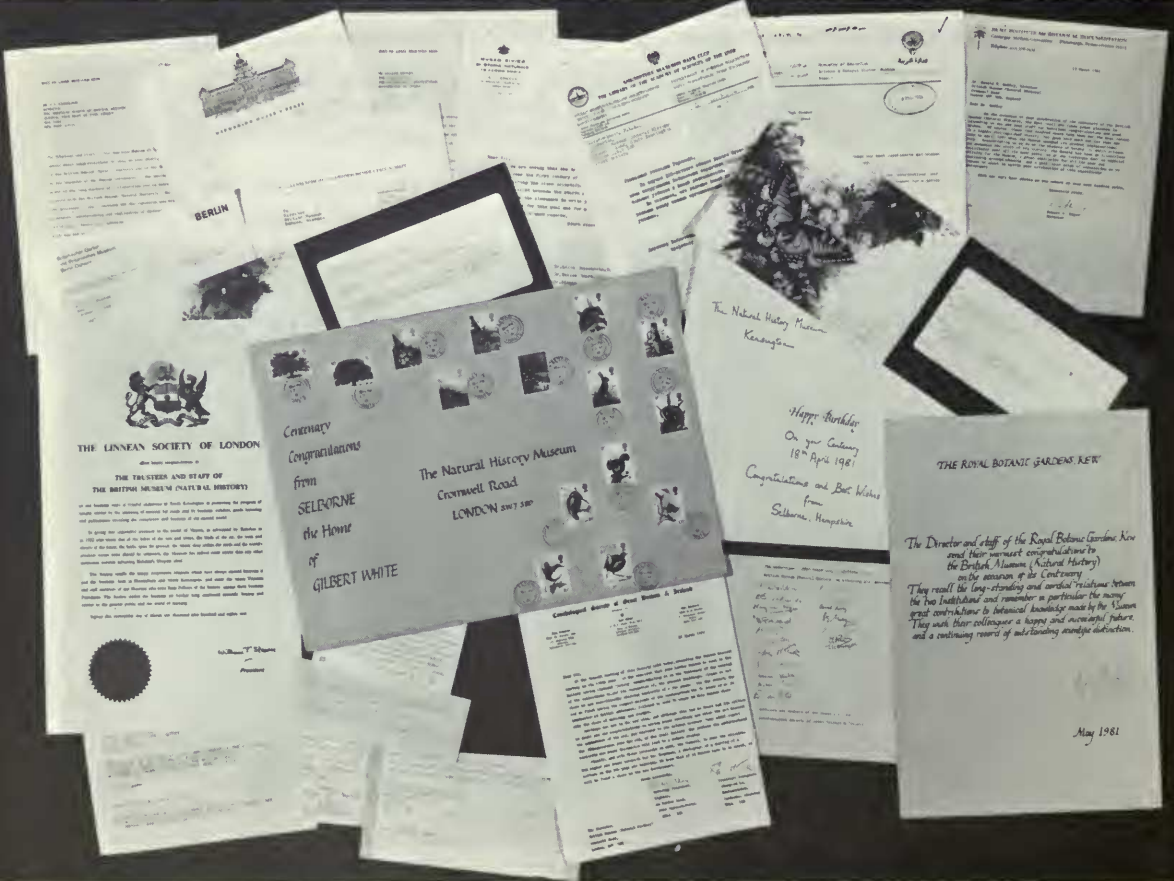
Left. Children of the Cockernhoe Village School, near Luton, Bedfordshire, visited the Museum on 6 November dressed in Victorian costume. The Museum's guide-lecturer, also suitably dressed, gave a tour of the galleries. *Right.* The first one hundred children through the gates of the Museum on 18 April were given tickets for free admission to London Zoo.



Staff centenary social evening in October, held in the Central Hall.

On 23 October the Central Hall rang to the staff 'letting their hair down' at the Staff Centennial Celebration with dancing, music, and a buffet complete with a cake in the shape of the Museum. The event was organized jointly by the staff side of the Museum Whitley Council and the Sports and Social Association. The Museum Sports and Social Association is 61 years old and was a founder member of the Civil Service Sports Council.

Centenary Year and the preceding one were busy for all the staff. However, the rewards came with the successful completion of the celebrations; with praise for the special publications, and the temporary and permanent exhibitions; widespread interest and acclaim for the Open Days; and perhaps most satisfying of all in these times of financial restraint a seventeen percent rise in the number of visitors.



Montage of some of the congratulations received by the Museum.

Centenary Open Days—examples of displays



Department of Zoology, exhibit on the 'diversity of jumping spiders', and the use of reference indexes to provide quick access to information for research and to answer enquiries.





Department of Entomology, exhibit on 'co-evolution of mammals and their lice', and identification and advisory services to the public.



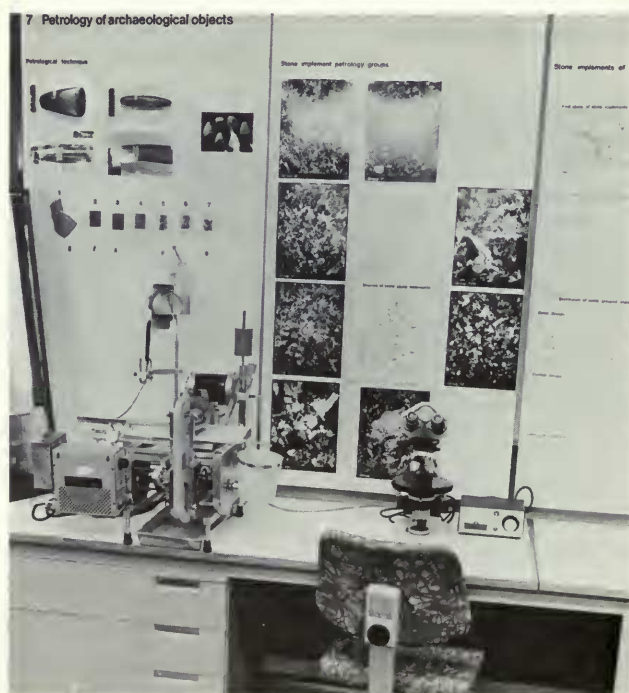


Department of Palaeontology, introduction to work of the Departmental Laboratory, and a typical exhibit, 'corals, coloniality and symbiosis'.





Department of Mineralogy, introducing visitors to the Department, and an exhibit on 'petrology of archaeological objects'.





Department of Botany, introducing visitors to the Department, and an exhibit on 'sources of some recent acquisitions'.





Department of Library Services mounted exhibitions in the General Library on 'Scientific explorers and exploration in the eighteenth and nineteenth centuries', and on various themes in the departmental libraries, for example, the 'History of the Department of Botany' by the Botany Library.



The centenary central event 27 May

Professor Sir Andrew Huxley PRS opened the new permanent exhibition *Origin of Species*. At 11.30 am speeches were delivered by Professor T. R. E. Southwood FRS, Chairman of Trustees and Sir Andrew in the gallery to approximately 180 guests. In the afternoon HM The Queen accompanied by HRH The Duke of Edinburgh paid an official visit. Arriving at 3 o'clock HM The Queen unveiled a plaque to commemorate the Museum's centenary and received a presentation of specially bound centenary publications. The Royal Party then viewed the *Origin of Species* exhibition.

Meanwhile staff and guests, numbering some 1260 were given tea and viewed the new exhibition after HM The Queen had gone into the Conversazione Room. An Open University film entitled *The Natural History Museum* and introduced by Mark Girouard was shown in the Lecture Theatre. Amongst the guests were representatives from Government, other scientific institutes, universities and museums. There were over seventy guests from overseas and foreign embassies.

In the Conversazione Room HM The Queen and HRH The Duke of Edinburgh viewed a display of ten scientific exhibits by Museum staff, and had an opportunity to talk with those manning the displays, heads of departments and other senior staff, as well as Staff Side, Sports and Social Association representatives, and those involved in the production of the centenary publications. Before leaving the Museum the Royal Party signed the Visitor's Book and a large coloured photograph of HM The Queen and HRH The Duke of Edinburgh.



Professor Sir Andrew Huxley PRS (right), opened the *Origin of Species* gallery in the Museum on 27 May 1981. Seen here with Professor T. R. E. Southwood FRS, Chairman of Trustees of the British Museum (Natural History) in a recreation of Charles Darwin's study at Down House in Kent.

Opening of the *Origin of Species* exhibition

Welcoming address by Professor T. R. E. Southwood FRS, Chairman of Trustees

It is indeed a great privilege and honour to welcome all our guests on behalf of the Trustees, Director and Staff of the Museum. We much appreciate the presence of representatives of many foreign museums and extend a very special welcome to them and to our Guest of Honour, the President of the Royal Society, Sir Andrew Huxley, who has kindly agreed to open this, our centenary exhibition, on the *Origin of Species*.

The topic of evolution, the theme of this exhibition, highlights the distinction—and confusion—between facts and theory.

I should like to place my remarks on this occasion within a somewhat allegorical framework. I hope this will illustrate the distinction between facts and theory. Let us imagine some Martian biologists looking at this gathering.

Firstly they would note that there was a cluster of *Homo sapiens* and looking more closely—perhaps with special ‘zeta-ray equipment’ at the names and addresses in our pocket books—that we have come from many parts of the country, indeed from many parts of the world and that we represent different professions and different age groups. They would conclude that this was an aggregation of *Homo sapiens*. These would be the *facts*, then the investigators would develop a *theory* to explain this important and unique occasion.

In formulating the theory the Martian team would seize on another fact, it is now 100 years since the British Museum (Natural History) moved to South Kensington. They would propose the ‘centenary theory of aggregation’.

However, once this paper was published an iconoclast would write a short letter to the leading scientific weekly and observe that ‘The Centenary Theory’ must be fallacious. This is a unique and clearly important occasion, but the significance of a hundred years is largely spurious—based simply on the method of numeration used by *Homo sapiens*. Surely, they would argue, representatives of foreign museums, research councils and all these others would not gather to celebrate merely the accretion of three digits in the age record.

So other theories would be published—one would stress the importance of the new exhibition on the *Origin of Species*. Evolution is the concept most closely connected with the day-to-day work of the Museum. It has been the major unifying idea in biology for more than a century. The first exhibition on this subject was set up by the second Director, Sir William Flower, and the last by Sir Gavin de Beer in 1958.

Other Martian scientists would decry the total population approach of the above theories and they would commence a detailed analysis of the participants. They would note the presence of the President of the Royal Society. The visit of the PRS is a most important occasion at the British Museum (Natural History), for the Museum has always had a strong association with the Society. Its founder, Sir Hans Sloane was a Fellow of the Society for 68 years; the Society donated its own collections to the Museum in 1781, just 200 years ago—a fact that would give rise to a subsidiary theory—‘the bicentenary of the R.S. donation’. The supporters of the main ‘Royal Society theory’ would note that until the 1963 Act the PRS was always a Trustee—now the President is again a Trustee and everyone is delighted and celebrating.

A fourth group would make a more careful scrutiny and they would find our guest of honour, the President of the Royal Society, had particular family connections both with the Museum and with the theory of the Origin of Species as propounded by Darwin. They would note, Sir Andrew, that your grandfather, T. H. Huxley, often referred to as ‘Darwin’s bulldog’, was an active Trustee and presented Darwin’s statue on behalf of subscribers, to the Museum. His own statue was unveiled in 1900 in the presence of the then Prince of Wales. Your brother, Julian Huxley, was the architect of the neo-Darwinian synthesis.

Most perceptive Martian scientists would support one of these theories for the origin of today’s gathering, but a few others claiming to apply Occam’s razor, and observing the luncheon to follow, would postulate that this was merely a prefeeding aggregation!

We all have evidence for the validity of one or more of these Martian theories and we probably recognise that a single reductionist theory for today’s gathering is unsatisfactory.

This exhibition seeks to emphasise the *fact* of evolution, of the diversity of Nature. It aims to provide the lay-visitor with a Darwinian view of the whole organisms that have in the past or do at present populate our biosphere. On behalf of the Board of Trustees I would like to congratulate the many staff, about 70, who under Dr Miles’ leadership have been responsible. My thanks go to them all and to the many outside the Museum, including our partners in the Property Services Agency, who have contributed to this fine exhibition.

About this fact that the biosphere has evolved and is evolving, there is *no* argument as our multi-authored volumes on evolution *Chance, change and challenge* so clearly show.

The details of the Theory of Natural Selection that seeks to account for the diversity, have always been controversial. Our perception of many aspects is now different from that of Darwin. As this subject is so much at the centre of the Museum’s research, one would expect its staff to be active in the exploration of new concepts or revolutionary interpretations—something would be wrong if they were not.

Returning to the theory, I would like to express a personal view: I believe the allegory I have presented of the extra-terrestrial theories for our aggregation is a valid, if slightly frivolous, model. Our aggregation, our gathering today, has several causes, some distant, some proximate. Likewise the Origin of Species is a composite theory, the basic mechanism is natural selection, but the detailed mechanisms will surely be varied and not mutually exclusive.

Sir Andrew, it is with much pleasure that I invite you to declare this exhibition open.

Address by Professor Sir Andrew Huxley PRS

As Professor Southwood has told you, the President of the Royal Society is no longer automatically a Trustee of the Natural History Museum, but he does still nominate to one of the positions on the Board of Trustees. My predecessor did not take the opportunity of nominating himself, but when his nominee conveniently retired just after my appointment, I was delighted to have that opportunity, and I took it. And I was equally delighted to be asked to perform today's ceremony since, as long as I can remember, I have had a strong attachment to this place, both from spending many days in it as a boy, and from the family connections that Professor Southwood spoke of. To most of my contemporaries and to succeeding generations, the rows which followed the publication of the *Origin of Species* in 1859 must seem 'old, unhappy, far-off things, And battles long ago', but for me they are much more real. My father was not quite old enough to have been a witness of the famous confrontation in 1860 between his father and the Bishop of Oxford, as he was born in the same year, but as a young man he met most of the protagonists of those battles. I almost felt that I knew them myself, both from the stories he told us of those days, and from reading their biographies and, especially, books such as my grandfather's essays.

As a centenary, today's event commemorates the opening of this Museum after the first stage of the transfer of the Natural History collections from the British Museum in Bloomsbury. The architect of the building itself was of course Alfred Waterhouse, and it is marvellous now to appreciate the details all over the building that used to be hidden under London grime. But the architect of the scheme as a whole, and the planner of many of its features, was Richard Owen. He was one of the greatest comparative anatomists of his time—indeed, of any time—but in my family he is particularly remembered as my grandfather's adversary in not one but several controversies—on the vertebrate skull in 1858, on the origin of species in 1860, and on the relation of man to the great apes in 1862. So, when asked to take part in an occasion which is partly in honour of Owen, I did have some slight scruples resembling those of Mr Collins in *Pride and Prejudice*: adapting the words of his First Epistle to the family at Longbourn, 'For some time I was kept back by my own doubts, fearing lest it might seem disrespectful to the memory of my grandfather for me to be on good terms with any one with whom it had always pleased him to be at variance'.

But in my case the hatchet was in fact buried long ago: T. H. Huxley was seconder of the appeal for a memorial to Owen, which took shape in the statue at the head of the main stairway here; he then spoke so eloquently of Owen's work as an anatomist that when Owen's grandson wrote his biography, he asked Huxley to contribute a section on Owen's anatomical work—and Huxley did so.

If Professor Southwood's Martians looked not only at this new exhibition but at articles about evolution and the classification of animals in the weekly scientific press, both of the last few months and nearer the time of the opening of this building, they could be excused for drawing a fifth conclusion, namely, that there is a cyclical component in scientific thinking. *Nature* has recently printed more than 30 letters centering around attacks on the scientific thinking of members of the staff of the Museum, and the correspondence has radiated into *New Scientist*, *Biologist*, and even across the Atlantic into *Science*. Now the basis of these attacks, which have to do with cladistic principles in classification, must be unintelligible to 99% of the readership of *Nature*. Because of my association with the Museum I have made a fairly serious attempt to understand this debate. I have been quite unable to comprehend the suggestion that cladism is somehow antagonistic to evolution, or that cladism is linked to the theory that evolution

progresses by fits and starts, or that cladism is more Marxist than other styles of classification. And the implication that its supposed Marxist character is a reason against its acceptance in science is more completely irrelevant than anything else that I can remember reading in a serious journal.

The only point on which I have become clear is that the letters in *Nature* must conceal the real reasons why such strong emotions are expressed: there must be hidden factors at work, understood only by the taxonomists and evolutionists themselves—dissentions between those who prefer a more rigorous type of classification on the one hand and those who prefer a more informative one, and between taxonomists who work on different groups of animals.

And although there are healthy differences of view within the Museum—illustrated for instance in the book of essays entitled *The evolving biosphere*—it is not in this Museum that the animosities I have been referring to are to be found.

But the obscurities and the irrelevances in the recent debate in *Nature* are such that it is best described by a phrase applied by my grandfather to an earlier phase of the arguments on evolutionary matters. In 1894 William Bateson published his famous *Materials for the study of variation* and sent a copy to Huxley. In his thank-you letter to Bateson, Huxley said: 'How glad I am to see . . . that we are getting back from the region of speculation into that of fact again. There have been threatenings of late that the field of battle of Evolution was being transferred to Nephelococcygia.' You will remember that Nephelococcygia was the city built by the Birds in Aristophanes' play, and it is the word which translates into 'cloud-cuckoo land'.

Well, I have been feeling that we have come full circle and that the recent debate in *Nature* was likewise in cloud-cuckoo land. Let us hope, however, that the cycle does not bring a repetition of what happened a few years after Bateson's book. More 'facts' of the very kind that was welcomed by Huxley led to the rediscovery of Mendelism—precisely the type of inheritance needed for Darwinian natural selection to operate. But instead of being recognised as such, it was regarded by most biologists as providing an alternative explanation for evolution, and Natural Selection went out of fashion for the best part of thirty years, till the work of J. B. S. Haldane and R. A. Fisher, of Sewall Wright and of Chetverikov, showed that the two theories were complementary to one another, not alternative, and the neo-Darwinian era began.

In passing, I might mention that in my own subject—muscle contraction—a tremendous amount of solid knowledge gained in the latter part of the nineteenth century—chiefly by means of the microscope—was eclipsed in the same sort of way, and at nearly the same date, by the rise of biochemistry. The eclipse was in fact longer-lasting—it went on for forty years or more—and it was more complete: the old knowledge was totally lost, the discoveries had to be made afresh, and it was only later that people came across the papers of the 1870s and 1880s describing these same phenomena.

Returning to Evolution, is there a danger that history will repeat itself and that neo-Darwinism will be eclipsed, perhaps by Molecular Biology, in the way that original Darwinism was eclipsed by classical Mendelian genetics? Let us hope not.

But how can we guard against such an event? I think the moral of what I have been saying is that simple solutions in biology are seldom complete solutions. This applies both to the way things actually work and to the way we think about them. Evolutionary change is brought about through natural selection working on Mendelian variation, not by either working alone, and other processes such as genetic drift and chromosomal accidents are probably important as well; in muscle contraction, essential events occur on the light-microscope scale as well as on the molecular scale; in classification we need to think in terms of grades as well as clades, as was pointed out by my brother Julian in the article where he proposed the word 'grade'; the proper emphasis on living as against fossil forms is different in different groups of animals.

If there is so much obscurity and irrelevance in the letters that have been appearing in *Nature*, why does *Nature* publish them? I think the answer is simple, and it is the same as the answer to the question 'Why does even *The Times* devote so much space to the Sutcliffe trial?'. It is that their respective readers enjoy these things. Again, I cannot express the matter better than was done more than a century ago during the first round of the evolutionary arguments. At the 1862 meeting of the British Association, Owen asserted that there are qualitative structural differences



The first display in the *Origin of Species* exhibition.

between the brain of man and the brains of other apes, and this was refuted by T. H. Huxley, with the support, by the way, of W. H. Flower, who twenty years later succeeded Owen to become Director of this Museum. After the meeting, Charles Kingsley wrote an imaginary contribution to that debate. It begins: 'Mr. President and Gentlemen, I mean Ladies and Mr. President, I am sure that all ladies and gentlemen present will see the matter just as I do; and I am sure we're all very much obliged to these scientific gentlemen for quarrelling.—No.—I don't mean that, that wouldn't be charitable and, it's a sin to steal a pin: but I mean for letting us hear them quarrel, and so eloquently too; though of course we don't understand what is the matter, and which is in the right . . .'

I have been speaking about letters which *Nature* has printed. But I cannot be silent on another action of *Nature*. On two occasions earlier this year they have published leading editorial articles about the Natural History Museum—one in February and one in March. The headline over the first of these reads 'Darwin's death in South Kensington'. It accuses the Museum of 'selling out on Darwinism'. 'Can it be' the editor fulminates, 'that the managers of the museum which is the nearest thing to a citadel of Darwinism have lost their nerve, not to mention their good sense?'. The Museum sent a brief reply, which *Nature* did not publish. It read as follows:

Sir,

The Trustees and Director of the British Museum (Natural History) cordially invite the readers and editor of *Nature* to the exhibition *Origin of Species* which opens to the public on 28 May this year, when they will discover that Darwin is alive and well in South Kensington.

As soon as I finish speaking you will be the first from outside the Museum to discover the truth of this statement. I have had the privilege of a very thorough pre-view, and I can assure you—if you need assurance—that you will see an admirably clear exposition of the way in which evolutionary change of an adaptive kind is brought about by Darwinian natural selection.

The accusations in *Nature's* editorials were made on the basis of a few words lifted from a sentence in one of the Museum's brochures, and given a meaning totally different from what is clearly implied by their context. Naturally the staff of the Museum feel that this was a blow beneath the belt, and so do I. *Nature* would no doubt reply that pushing criticism beyond the point which can be substantiated is a risk that has to be taken by the Press in doing its job—a vital one, as I readily agree—of alerting the public to suspected evil designs in high places.

In this connection I want to say only two more things.

First, I would remind *Nature* that crying 'wolf' will drive its readers into disregarding its future warnings.

Second, to those who have been wounded by these articles, I would commend the advice given by Lord Palmerston just one hundred and fifty years ago in relation to another highly respected journal. The occasion was the foundation of the British Association for the Advancement of Science, which took place in 1831. This newly-formed body was attacked and ridiculed in the pages of *The Times*, and Sir Roderick Murchison, one of the Association's most active promoters, wrote to a friend: 'I was complaining to Lord Palmerston of the injustice of such treatment. "Pooh, pooh", said he, "never mind them. A man who is not *Times*-proof cannot succeed in life"'. Nowadays we must make ourselves *Nature*-proof as well.

Most of you will already know that this exhibition is part of the programme of modernisation that the Museum undertook nearly ten years ago under its previous Director, Sir Frank Claringbull. Inevitably this programme attracted criticism, in accordance with the immortal principle enunciated by Francis Cornford in *Microcosmographia Academica*: 'There is only one argument for doing something; the rest are arguments for doing nothing. The argument for doing something is that it is the right thing to do'. I am confident that when the dust has settled, everyone—perhaps I should say almost everyone—will recognise that this modernisation was indeed the right thing to do.

The four sections of this programme that are already open have proved highly popular; they are on: *Human Biology*, *Introducing Ecology*, *The Dinosaurs and their living relatives*, and *Man's Place in Evolution*. The Trustees' plan for the next stages of the programme, recently announced in a letter to *Nature*, will involve less change from the familiar character of the original displays in the Museum. It consists of exhibits devoted to animal diversity. These will illustrate the range of creatures found on this planet. There will be three different groups of mammals, living and fossil; three on different groups of arthropods, and, last in the series, one entitled 'Unity in Diversity'—an introduction to all the Museum's exhibitions. In addition, an exhibition is planned on British Natural History, designed to meet the needs of committed naturalists. This reconstruction will fit the Museum to stride forward into its second century.

And let me remind you of two awards that the new exhibitions in this programme of renewal have won. The National Heritage Museum of the Year Award for 1980 went to the first three of these exhibitions, and in the competition for the 1980 European Museum of the Year Award, the only Special Commendation that came to a museum in Britain was to the Natural History Museum for the first four of these exhibitions collectively.

In the confidence that this new exhibition, on the *Origin of Species*, will also prove immensely successful, I now have great pleasure in declaring it open.

Right. HM The Queen and Professor T. R. E. Southwood FRS cross the Central Hall of the Museum watched by the staff, and their relations and friends.

Far right. HM The Queen bidding farewell to the Chairman of Trustees, Professor T. R. E. Southwood FRS and Mrs Southwood (behind) and the Director, Dr R. H. Hedley.



Above. HM The Queen and HRH The Duke of Edinburgh. HM The Queen receives specially bound copies of books published by the Museum for centenary year, from Professor T. R. E. Southwood FRS.





To commemorate their visit to the Museum, HM The Queen and HRH The Duke of Edinburgh signed a coloured photograph and the visitor's book.



HM The Queen leaving the Museum after the visit. The Mayor and Mayoress of the Royal Borough of Kensington and Chelsea, Councillor and Mrs Arnold H. Stevenson, stand by the car.

Souvenirs of centenary year



The Museum has a long association with publishing and since 1881 it has issued more than 3000 books. The range of publications is wide, from the popular introductory guide to research monographs and catalogues; the *Bulletin of the British Museum (Natural History)*, instituted in 1949, is issued in five series, Botany, Entomology, Geology, Historical and Zoology. Centenary year provided an excellent opportunity to publish a number of special volumes.

Actually published in 1980, the three-volume *Animal identification, a reference guide* (two volumes edited by R. W. Sims and one by D. Hollis) is a bibliography of primary sources of reference that can be used to identify animals throughout the world. *Chance, change and challenge* is a collection of papers, mostly by Museum staff, on evolutionary subjects and under the general editorship of P. H. Greenwood. It is published in two volumes: *The evolving earth* edited by L. R. M. Cocks, and *The evolving biosphere* edited by P. L. Forey. The other centenary volumes are largely concerned with the Museum and its history. *The Natural History Museum at South Kensington: a history of the British Museum (Natural History) 1753-1980* by William T. Stearn provides a detailed account of the history of the Museum whilst *The British Museum (Natural History)* with text by Peter Whitehead, and colour illustrations by Colin Keates goes behind the scenes and describes the history, collections and work of the Museum. *Alfred Waterhouse and the Natural History Museum* by Mark Girouard is an account of the history of the building and some of its most interesting architectural aspects. Accompanying an exhibition of the same name *Nature Stored Nature Studied: collections, conservation and allied research at the British Museum (Natural History)* describes the growth of the collections and provides a brief review of current work in each of the scientific departments and the library. *Origin of species* is a specially written work that includes all the main ideas and images from the exhibition. A special edition of the souvenir guide was also issued in 1981. A. E. Gunther, the grandson of a former Keeper of Zoology and a benefactor to the Museum libraries, published privately a contribution to the centenary *The founders of science at the British Museum 1753-1900*.

So that visitors to the Museum might obtain their own memento of the centenary a large selection of souvenirs were made available for sale in the gift shop. Each souvenir had an aspect of the Museum building depicted on it and the dates 1881-1981.

Centenary year

Chronology

This chronology deals with events which were either directly connected with the centenary celebrations or related to them. There were other television and radio broadcasts and many press articles about the Museum during 1981 which are not included.

January

- 2 Exhibition *Nature Stored Nature Studied: collections, conservation and allied research at the British Museum (Natural History)* opened (ended 31 December).
- 2 Publication of the book *Alfred Waterhouse and the Natural History Museum* by Mark Girouard; and an article entitled 'British Museum (Natural History)' by W. E. Swinton in *Natural History* vol 90, no 1.
- 2 Visits. Special centenary offer for group visits (ended 31 March).
- 5 Broadcast. BBC Radio London on *Nature Stored Nature Studied*.
- 22 Broadcast. BBC TV *Nationwide* includes feature on the Museum.

February

- 10 Broadcast. BBC Radio London on the 'Importance of Darwin'.
- 12 Lecture. Scientific Officers' Association 1st Special Centenary Lecture. *The future development of taxonomy in Great Britain* by Professor V. H. Heywood.
- 13 Broadcast. BBC Radio 4 *Kaleidoscope* on the centenary of the Museum (repeated 17 February).
- 18 Broadcast. BBC Radio 4 Schools programme on Darwin (repeated 26 February).

March

- 12 Lecture. Scientific Officers' Association 2nd Special Centenary Lecture. *The taxonomic institution in contemporary society* by the Director, Dr R. H. Hedley.
- 17 Broadcast. LBC on scientific activities of the Museum.
- 18 Broadcast. LBC on dinosaurs.
- 23 Award of plaque for special commendation in the competition for European Museum of the Year, 1980. Presented to the Director by Mr H. J. de Koster, President of the Parliamentary Assembly of the Council of Europe, at a ceremony held in the Guildhall, City of London.
- 24 Publication of *Nature Stored Nature Studied: collections, conservation and allied research at the British Museum (Natural History)*.
- 30 Publication of *Chance, change and challenge* under the general editorship of P. H. Greenwood.
- 31 Publication of *The British Museum (Natural History)* by Peter Whitehead and Colin Keates.

April

- 6-10 Symposium organized by the Systematics Association in association with the Museum entitled *Time and space in the emergence of the biosphere*.
- 9 Publication of 'Evolution of natural history at South Kensington' by R. Fifield in *New Scientist*, vol 90, no 1248. The front cover also depicted the Museum.
- 10 Publication of *The Natural History Museum at South Kensington: a history of the British Museum (Natural History) 1753-1980* by William T. Stearn.

- April
- 13-16 Conference organized by the Systematics Association and the Society for the Bibliography of Natural History in association with the Museum entitled *History in the service of systematics*.
- 15 Broadcast. BBC Radio 4 *Today* on the centenary of the Museum.
- 16 Broadcasts. BBC World Service *Outlook*.
Thames Television News.
- 17 Broadcasts. BBC Radio 4 *Kaleidoscope* and *Today*.
Capital Radio. Interviews with staff.
- 18 Centenary day.
Free tickets to the London Zoo or Whipsnade given to the first 100 children through the doors.
Broadcasts. BBC World Service *Science Today*.
LBC *Jellybone*.
- 19 Broadcast. BBC TV, *The ark in South Kensington* by David Attenborough (repeated 19 July).
- 22 Exhibition *Indian Botanical Paintings: the golden age of botanical illustration* opened (ended 31 July).
Broadcast. BBC Local Radio Service on *Indian Botanical Paintings*.
- 25 Publication of the special issue of the *Biologist*, vol 28, no 2, with articles on the Museum.
- 26 Broadcast. BBC TV *News Review* on *Indian Botanical Paintings*.
- 28 Broadcast. BBC TV *Lion*, a film on taxidermy in the Museum.
- May
- 1 Publication of *Origin of Species*.
- 5 Broadcast. LBC on the publication of *The British Museum (Natural History)*.
- 27 Exhibition *Origin of species* opened by Professor Sir Andrew Huxley PRS.
Visit by HM The Queen and HRH The Duke of Edinburgh.
Broadcasts. BBC Radio 4 on the opening of *Origin of Species*.
BBC TV News and Thames TV News on HM The Queen's visit.
- June
- 3 Broadcast. BBC World Service on cladistics (in French).
- 22 Broadcast. BBC TV *Newsnight*, 'Controversy in Evolution'.
Capital Radio. Review of *Origin of Species*.
- July
- 1 Exhibition to commemorate the close connections between the British Association for the Advancement of Science, celebrating its 150th anniversary and the Museum (ended 31 December).
- 26 Sponsored 100 mile run successfully completed by David Cooper of the Department of Zoology. £1130 raised in aid of Arthritis Care and the Spinal Building Appeal Fund for Stoke Mandeville hospital.
Broadcast. BBC Local Radio Service on David Cooper's 100 mile run.
- 30 Broadcast. BBC Radio 4 *Womans Hour*, 'Science simplified'.
- October
- 1 Exhibition. *Perception*, Hall of Human Biology opened.
Broadcast. LBC on *Perception* exhibit.
- 2 Broadcast. BBC Radio 4 on Darwin.

October

- 8 Exhibition on British natural history specially designed for visually handicapped people opened (ended 15 November).
Broadcast. Radio Medway on special exhibit for visually handicapped people.
- 23 Social evening organized by the Staff Side of the Museum Whitley Council, and the Museum Sports and Social Association.
- 24 Broadcast. BBC TV *Swop Shop* on dinosaurs.
- 26 Broadcast. LBC. Sir Arthur Drew on plans for the East Infill; also a programme on the Museum as a day out.
- 29 Publication of Centenary Miscellanea issue of *Bulletin of the British Museum (Natural History)* Geology series vol 35, no 3, with nine short papers, each of which re-examines historical material in the collections of the Department of Palaeontology.

November

- 6 Visit by Cockernhoe School, Bedfordshire in Victorian costume.
- 12 Lecture. Scientific Officers' Association 3rd Special Centenary Lecture. *What is science for anyway?* by Professor Sir Frederick Dainton FRS.
- 17-19 Open Days.
- 18 Exhibition *Museum in Focus* opened (ended 31 January 1982).
- 27 Broadcast. BBC TV News on the Open Days.

December

- 4 Publication of the centenary issue of the house journal *Chrysalis*.
- 14-16 Lecture, *A botanist looks at evolution* by David Bellamy. Delivered twice daily to invited audience of 6th formers.
- 22 Broadcast. BBC Radio 4 on the Children's Centre.

